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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,807	04/27/2001	Kraig A. Kirschner	261/178	4280

167 7590 01/09/2004

FULBRIGHT AND JAWORSKI L L P
PATENT DOCKETING 29TH FLOOR
865 SOUTH FIGUEROA STREET
LOS ANGELES, CA 900172576

EXAMINER


BRITTAIN, JAMES R

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 01/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s) 	
	09/844,807	KIRSCHNER, KRAIG A.	
	Examiner	Art Unit	
	James R. Brittain	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-12 is/are allowed.
- 6) ☒ Claim(s) 13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13 and 14 are rejected under 35 U.S.C. §103(a) as being unpatentable over applicant's description of the prior art as described in the information disclosure statement received July 30, 2001 in view of Koyama (US 5259165).

Applicant's description of the prior art is described in the information disclosure statement received July 30, 2001. Therein applicant describes how the AFCON Flyer 962 square washer is utilized by stating that "This washer is prior art to the present invention and has been employed in the prior art in pairs with a threaded shaft extending therebetween, held by nuts where the washers are placed above and below a cord space in the upper beam of a steel web joist such as disclosed in the resent application. Hangers have been coupled with the shaft extending between the washers. This coupling is typically below the lower washer and is held in place by the nut threaded onto the shaft." Thus applicant has described a seismic suspension system with a steel web joist such as disclosed in this application with the two angle elements, each having a first leg and a second leg, the first legs being parallel with a cord space therebetween and the second legs extending in opposite direction, an anchor plate and an engagement plate placed respectively above and below the cord space with the anchor plate held in juxtaposition with the second legs and the engagement plate held against the edges of the first

Art Unit: 3677

legs by nuts upon a threaded shaft. The threaded shaft extends below the engagement plate and can receive a hanger, which is secured by the lower nut. The prior art described by applicant fails to provide the engagement plate with upstanding engagement portions to either side of the flat anchor portion, the engagement plate extending across the cord space with each upstanding engagement portion having a distal edge with an engagement profile in interlocking engagement with the first legs wherein each engagement portion being at an obtuse angle to the flat anchor portion. However, Koyama (figures 3, 4 and claims 1 and 3-6) teaches a similar suspension system and further suggests in combination the steel web joist including a beam with two angle elements 4, each having a first leg and a second leg, the first legs being parallel with a cord space therebetween and the second legs extending in opposite directions; an anchor plate 2 having a first hole 2g therethrough; an engagement plate 3 including a flat anchor portion 3c having a second hole 3g therethrough and upstanding engagement portions 3a, 3b to either side of the flat anchor portion 3c, the engagement plate 3 extending across the cord space opposite the anchor plate 2, the upstanding engagement portion 3a having a distal edge with an engagement profile defined by central tongue 3e extending between the shoulders 3d, the other upstanding engagement portion 3b has a distal edge with an engagement profile defined by central tongue 3f which interlocks the engagement portion 3b between the first legs so that it will not move laterally to either the left or right as shown in figure 4.

FIG. 3

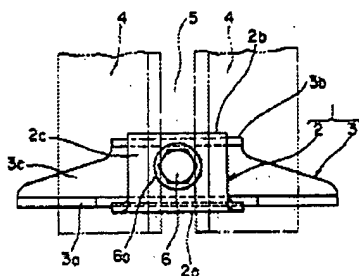
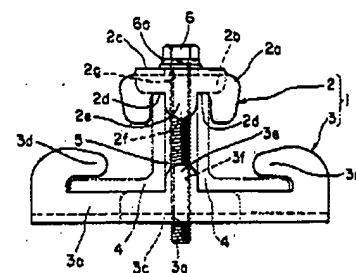


FIG. 4



The engagement plate secures interlocks the first legs together by contacting the first legs between the second legs by the tongue 3e. Applicant indicates the structure that provides interlocking engagement in the specification [0006] by stating "In a second separate aspect of the present invention, the engagement plate includes distal edges with tongues extendible to between the parallel legs of the steel web joist beam for interlocking engagement." This establishes that all that is required for interlocking engagement is that the engagement plate distal edges include tongues extendible between the parallel legs of the web joist and Koyama provides such structure in tongues 3e and 3f. While the last sentence of [0006] states, "Shoulders to either side of each tongue may abut against the edges of the legs", the use of the term "may" indicates that the shoulders are not required for interlocking engagement to exist. A stud extends from the first hole 3g to and beyond the second hole 2g, the stud is adapted to secure the anchor plate and the engagement plate to the beam of the steel web joist. The bolt acts as a support for an object suspended therefrom as indicated in claims 3-6 of Koyama. The tongues 3e and 3f are sandwiched by the first legs and act to hold the angle elements at a given interval (col. 3, lines 11-15) and thereby provide better dimensional stability to the beam thereby providing an engineering advantage. Applicant is reminded that "[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968). The Koyama reference would suggest to one of ordinary skill in the art that the engagement plate 3 would be prevented from lateral movement by the tongues 3e, 3f being interlocked between the first legs and therefore have the benefit of maintaining the threaded shaft in a position that prevents lateral movement of

Art Unit: 3677

the attachment while also contributing to the greater dimensional stability of the beam.

Accordingly, it would have been obvious to modify the prior art described in the information disclosure statement received July 30, 2001 to include upstanding engagement portions to either side of the flat anchor portion, the engagement plate extending across the cord space with each upstanding engagement portion having a distal edge with an engagement profile in interlocking engagement with the first legs as shown in Koyama so as prevent lateral movement of the engagement plate while also providing for greater dimensional stability of the beam and as to each upstanding engagement portion being at an obtuse angle to the flat anchor portion changes in shape have been found obvious absent evidence that the particular configuration is significant, *In re Dailey* 357 F.2d 669, 149 USPQ 47 (CCPA 1966), and the configuration of Koyama, which has 90° angle configuration of the upstanding engagement portion, is a fraction of a degree less than being an obtuse angle and maintains the legs of the angle elements in a spaced configuration thereby providing the same function as applicant's device so the small change in angle so as to be less than 90° would have been obvious.

As to claim 14, the prior art as described in the information disclosure statement received July 30, 2001 utilizes a nut to hold the square anchor plate in the form of the 962 square washer in place and fails to state that hole in the anchor plate itself can be threaded. However, Koyama recognizes the equivalence of a separate nut to secure the plate and a threaded aperture to secure a plate thereby providing a strong secure connection in the passage found in column 4, lines 23-28:

“According to the first embodiment, the fixing member 6 is screwed into the screw hole 3g defined on the lower metal fitting 3. However, the lower metal fitting 3 may have a small hole 3h

therein through which the fixing member 6 is inserted and fixed by a nut 6b by way of a washer 6a as illustrated in FIG. 8."

Accordingly, it would have been obvious to modify the anchor plate as described in the information disclosure statement received July 30, 2001 so that the hole itself is threaded in view of Koyama teaching that this is an equivalent structure to having a separate nut in providing a strong connection.

Allowable Subject Matter

Claims 10-12 are allowed.

Response to Arguments

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the configuration of inclined engagement portions at an obtuse angle provides specific advantage in creating some degree of flexibility as found in the remarks on page 6, ¶2, lines 2-8) are not recited in the rejected claim(s) since no flexibility is claimed and since flexibility is a property of the rigidity of the engagement plate review of the specification as filed shows no disclosure of the engagement plate being flexible nor is it necessitated since the engagement plate could well be rigid and still operate as disclosed. Similarly, applicant argues that with the engagement plate including such obtuse portions, additional resistance to seismic loads would be created by the corner between the plate top surface and the plate edge surface being in compressed contact with the legs as found in the remarks on page 6, ¶2, lines 8-13. However, this corner engagement is also not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van*

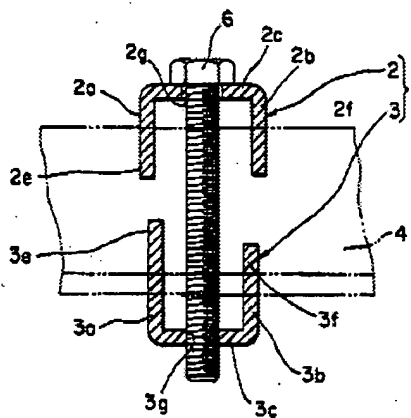
Art. Unit: 3677

Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Also, since the specification fails to indicate that the engagement plate is flexible, the claims cannot be allowed based on an argument that fails to fall within the scope of applicant's disclosure.

Applicant also argues that the structure of the upstanding engagement portion is more directly aligned with the line of force in lateral seismic responses than would be a flange at a right angle to the anchor portion as found in the remarks on page 6, ¶2, lines 13 through page 7, ¶1, line 2. However, none of this is found in the application as filed and the allegation and whatever benefits derived therefrom is not clear since the line of force in lateral seismic responses extending from a perspective into the paper of the device of Koyama as shown in figure 5 as reproduced below would be just as aligned as though the engagement portions were at obtuse angles to the flat anchor portion.

FIG. 5

Force into the paper would be a lateral seismic response and the engagement portion at an obtuse angle would not provide a benefit as it would still be aligned with the engagement portion



Applicant has not established evidence that the particular obtuse arrangement is significant.

Art Unit: 3677

In response to applicant's argument that Koyama is nonanalogous art since applicant alleges that it is not used in the same environment as found in the remarks, page 8, the last two lines through page 9, line 2, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the device of Koyama is used to mount ducts, air conditioners, and pipes at a building site (col. 1, line 67 - col. 2, line 2) and since applicant states that the field of his invention is building construction hardware for mounting components such as utilities [0001], Koyama is within applicant's field of endeavor.

Applicant argues that there is no suggestion to modify the engagement portions so as to be obtuse. However, as indicated in the rejection and as to each upstanding engagement portion being at an obtuse angle to the flat anchor portion changes in shape have been found obvious absent evidence that the particular configuration is significant, *In re Dailey* 357 F.2d 669, 149 USPQ 47 (CCPA 1966), and the configuration of Koyama, which has 90° angle configuration of the upstanding engagement portion, is a fraction of a degree less than being an obtuse angle and maintains the legs of the angle elements in a spaced configuration thereby providing the same function as applicant's device so the small change in angle so as to be less than 90° would have been obvious. There is no indication in the specification as filed that just a small fraction of a change in angle from that of Koyama would provide any advantage. The specification is totally silent on this point.

Conclusion

Art. Unit: 3677

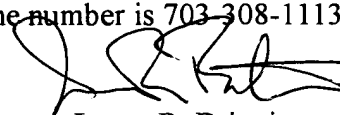
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Brittain whose telephone number is 703-308-2222. The examiner can normally be reached on M, W & F 5:30-1:30, T 5:30-2:00 & TH 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.



James R. Brittain
Primary Examiner
Art Unit 3677

JRB